

Notice of Allowability

Application No.

09/368,651

Examiner

Thien D Tran

Applicant(s)

BHARDWAJ ET AL.

Art Unit

2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/12/2004.
2. ☒ The allowed claim(s) is/are 1-5, 7-9, 6, 10-16, 18-20, 17, 21-25, 27-29, 26, 30-35, 37-39, 36 renumbered as 1-39.
3. ☒ The drawings filed on 08/05/1999 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

REASONS FOR ALLOWANCE

1. The following is an examiner's statement of reasons for allowance:

Regarding claims 1, 6, the prior arts fail to teach or fairly suggest a method for providing multicast transmission using a distributed router, the method comprises the steps of:

upon receiving a packet, generating a multicast session table entry based on a list of downstream virtual subnetworks and a multicast group membership;

establishing virtual connections between the source virtual subnetwork and edge devices coupled to virtual subnetworks identified in the list of downstream virtual subnetworks;

downloading the multicast session table entry to the edge devices, wherein the distributed router comprises the edge devices, in combination with other limitations as specified in claims 1, 6.

Regarding claims 10, 17, the prior arts fail to teach or fairly suggest a method for providing multicast transmission using a distributed router, the method comprises the steps of:

generating a routing table based on topology of virtual subnetworks;

generating a group affiliation table based on multicast group membership;

establishing virtual connections based on a multicast session table entry to transport a data packet to members of a group, in combination with other limitations as specified in claims 10, 17.

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Regarding claims 21, 26, the prior arts fail to teach or fairly suggest a distributed router, the distributed router comprises a processing module and a memory coupled to the processing module, wherein the memory stores operational instruction that cause the processing module to

upon receiving a packet, generating a multicast session table entry based on a list of downstream virtual subnetworks and a multicast group membership,

establish virtual connections between the source virtual subnetwork and edge devices coupled to virtual subnetworks identified in the list of downstream virtual subnetworks,

download the multicast session table entry to the edge devices, wherein the distributed router comprises the edge devices, in combination with other limitations as specified in claims 21, 26.

Regarding claims 30, 36, the prior arts fail to teach or fairly suggest a distributed router, the distributed router comprises a processing module and a memory coupled to the processing module, wherein the memory stores operational instruction that cause the processing module to

generate a routing table based on topology of virtual subnetworks,

generate a group affiliation table based on multicast group membership,

establish virtual connections based on a multicast session table entry to transport a data packet to members of a group, in combination with other limitations as specified in claims 30, 36.

Conclusion

2. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Thien Tran whose telephone number is (571) 272-3156. The examiner can normally be reached on Monday-Friday from 8:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu, can be reached on (571) 272-3155. Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-2600.

3. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197.

Patent Examiner

Thien Tran

DUCHO
PRIMARY EXAMINER

Ducho
2-17-05